

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

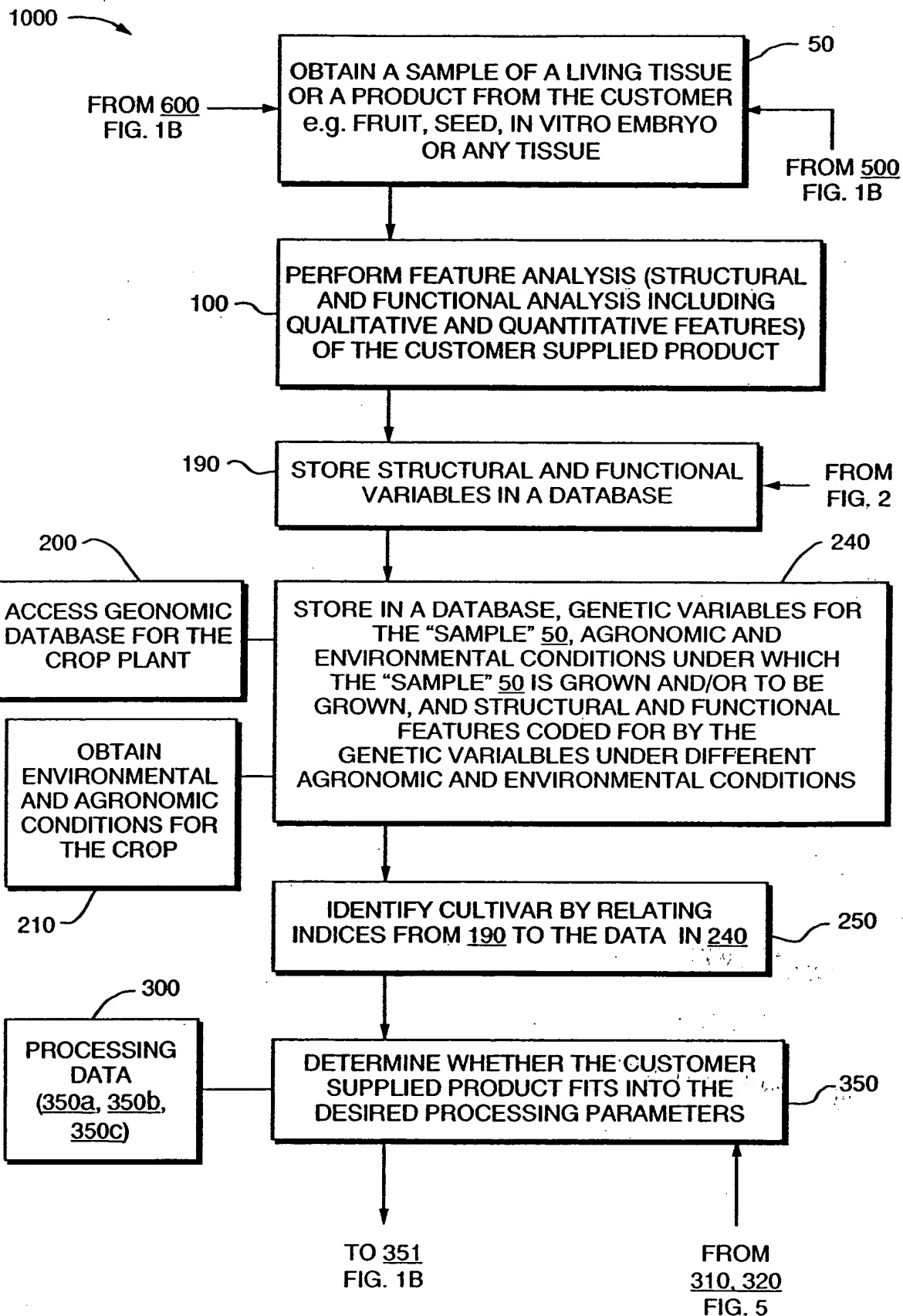


FIG. 1A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DP2FTSMAN		

Serial No. 09/521,107
Inventor: Johnson
Title: Method and Information System For Non-Random Selection of Plant Varieties
Structural And Functional Features For Tissue And Plant Product Processing

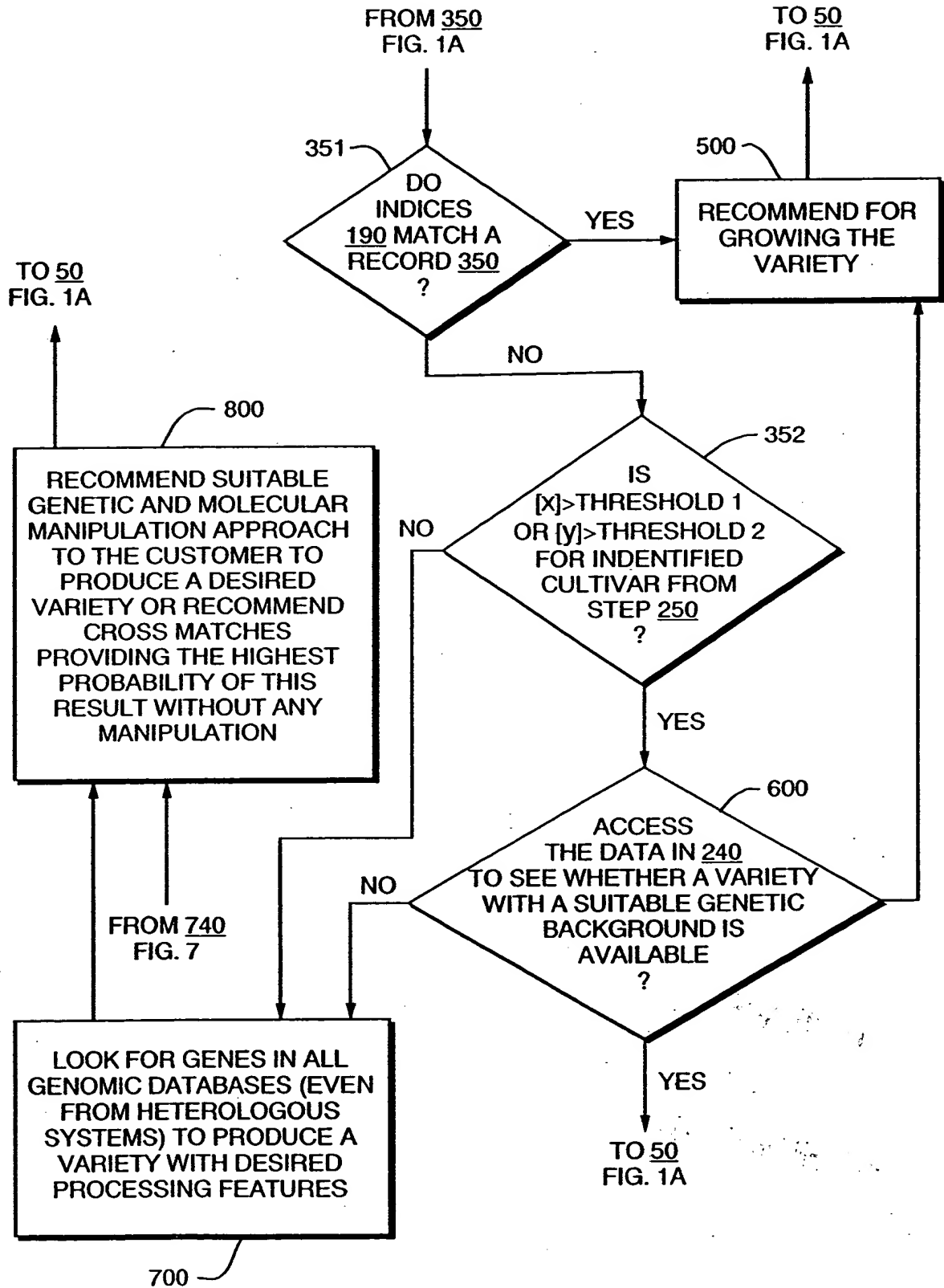


FIG. 1B

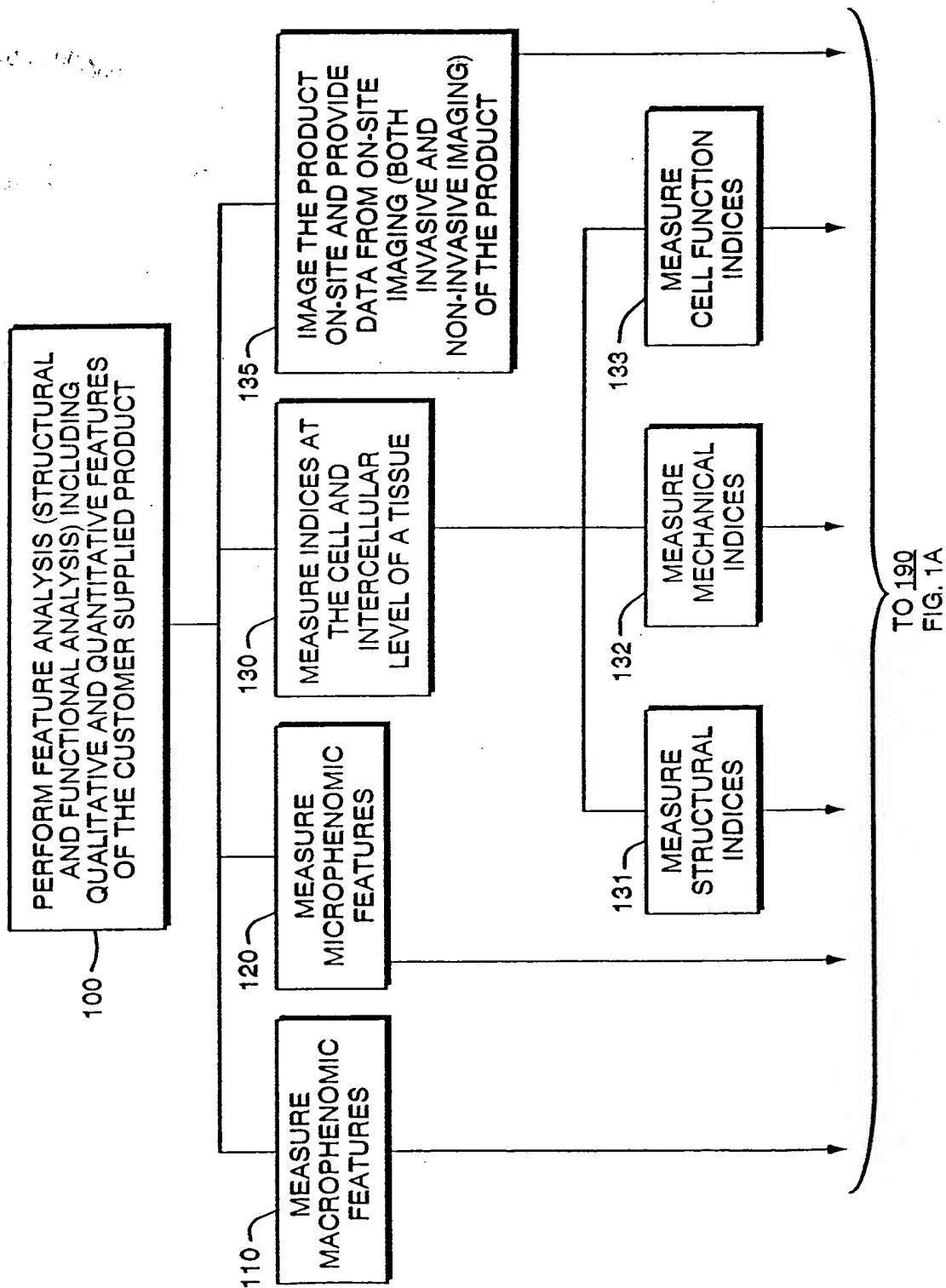


FIG. 2

APPROVED	O.G. FIG.	
BY [redacted]	CLASS	SUBCLASS
FTSMAN		

<p>250a →</p> <p>GENETIC INFORMATION CULTIVAR 1 <u>253a</u></p> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁f₂f₃f₄ • β-CAROTENE GENE(S) B₁ • LYCOPENE CONTENT GENE(S) hp₁ • FRUIT SUGAR GENE(S) s₁ 	<p>251a →</p> <p>GENETIC INFORMATION CULTIVAR 1 <u>254a</u></p> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁f₂f₃f₄ • β-CAROTENE GENE(S) B₁ • LYCOPENE CONTENT GENE(S) hp₁ • FRUIT SUGAR GENE(S) s₁
<p>GROWTH CONDITIONS INFORMATION SET 1 <u>240a</u></p> <ul style="list-style-type: none"> • DAY TEMPERATURE 15-20°C • SOIL FERTILITY 6000 (kg NITROGEN/HA) • SOIL MOISTURE 20% 	<p>GROWTH CONDITIONS INFORMATION SET 2 <u>241a</u></p> <ul style="list-style-type: none"> • DAY TEMPERATURE 23-25°C • SOIL FERTILITY 4000 (kg NITROGEN/HA) • SOIL MOISTURE 30%
<p>PRODUCT FEATURE RANGE SET 1 <u>256a</u></p> <ul style="list-style-type: none"> • FRUIT SIZE 50-60mm • β-CAROTENE 8-10ppm • LYCOPENE 90-100ppm • TOTAL FRUIT SUGARS 65-70% 	<p>PRODUCT FEATURE RANGE SET 2 <u>257a</u></p> <ul style="list-style-type: none"> • FRUIT SIZE 70-80mm • β-CAROTENE 4-6ppm • LYCOPENE 70-80ppm • TOTAL FRUIT SUGARS 65-70%

TO FIG. 3B

FIG. 3A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
TSMAN		

<p>252a</p> <p>GENETIC INFORMATION CULTIVAR 1 <u>255a</u></p> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁f₂f₃f₄ • β-CAROTENE GENE(S) B₁ • LYCOPENE CONTENT GENE(S) hp₁ • FRUIT SUGAR GENE(S) s₁ 	<p>250b</p> <p>GENETIC INFORMATION CULTIVAR 2 <u>253b</u></p> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁f₂ • β-CAROTENE GENE(S) B₁B₂ • LYCOPENE CONTENT GENE(S) hp₁hp₂ • FRUIT SUGAR GENE(S) s₁s₂
<p>GROWTH CONDITIONS INFORMATION SET 3 <u>242a</u></p> <ul style="list-style-type: none"> • DAY TEMPERATURE 27-30°C • SOIL FERTILITY 2000 (kg NITROGEN/HA) • SOIL MOISTURE 50% 	<p>GROWTH CONDITIONS INFORMATION SET 1 <u>240b</u></p> <ul style="list-style-type: none"> • DAY TEMPERATURE 15-20°C • SOIL FERTILITY 6000 (kg NITROGEN/HA) • SOIL MOISTURE 20%
<p>PRODUCT FEATURE RANGE SET 1 <u>258a</u></p> <ul style="list-style-type: none"> • FRUIT SIZE 90-100mm • β-CAROTENE 1-2ppm • LYCOPENE 55-65ppm • TOTAL FRUIT SUGARS 65-70% 	<p>PRODUCT FEATURE RANGE SET 1 <u>256b</u></p> <ul style="list-style-type: none"> • FRUIT SIZE 55-60mm • β-CAROTENE 9-10ppm • LYCOPENE 95-100ppm • TOTAL FRUIT SUGARS 65-70%

FROM FIG. 3A

TO FIG. 3C

FIG. 3B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
JOHNSON		

251b

252b

<p>GENETIC INFORMATION CULTIVAR 2 <u>254b</u></p> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f_1f_2 • β-CAROTENE GENE(S) B_1B_2 • LYCOPENE CONTENT GENE(S) hp_1hp_2 • FRUIT SUGAR GENE(S) s_1s_2 	<p>GENETIC INFORMATION CULTIVAR 2 <u>255b</u></p> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f_1f_2 • β-CAROTENE GENE(S) B_1B_2 • LYCOPENE CONTENT GENE(S) hp_1hp_2 • FRUIT SUGAR GENE(S) s_1s_2
<p>GROWTH CONDITIONS INFORMATION SET 2 <u>241b</u></p> <ul style="list-style-type: none"> • DAY TEMPERATURE 23-25°C • SOIL FERTILITY 4000 (kg NITROGEN/HA) • SOIL MOISTURE 30% 	<p>GROWTH CONDITIONS INFORMATION SET 3 <u>242b</u></p> <ul style="list-style-type: none"> • DAY TEMPERATURE 27-30°C • SOIL FERTILITY 2000 (kg NITROGEN/HA) • SOIL MOISTURE 50%
<p>PRODUCT FEATURE RANGE SET 2 <u>257b</u></p> <ul style="list-style-type: none"> • FRUIT SIZE 75-80mm • β-CAROTENE 5-6ppm • LYCOPENE 75-80ppm • TOTAL FRUIT SUGARS 65-70% 	<p>PRODUCT FEATURE RANGE SET 1 <u>258b</u></p> <ul style="list-style-type: none"> • FRUIT SIZE 20-30mm • β-CAROTENE 0.1-0.3ppm • LYCOPENE 20-25ppm • TOTAL FRUIT SUGARS 65-70%

FROM FIG. 3B

TO FIG. 3D

FIG. 3C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DP: FT&MAN		

Serial No. 09/021,107
 Inventor: Johnson
 Title: System and Information System For Non-Random Selection of Plant
 Structural And Functional Features For Tissue And Plant Product Processing

<p>250X →</p> <p>GENETIC INFORMATION CULTIVAR X <u>253X</u></p> <hr/> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁ • β-CAROTENE GENE(S) B₁B₂B₃B₄ • LYCOPENE CONTENT GENE(S) hp₁hp₂hp₃hp₄ • FRUIT SUGAR GENE(S) s₁s₂s₃s₄ 	<p>→ 251X</p> <p>GENETIC INFORMATION CULTIVAR X <u>254X</u></p> <hr/> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁ • β-CAROTENE GENE(S) B₁B₂B₃B₄ • LYCOPENE CONTENT GENE(S) hp₁hp₂hp₃hp₄ • FRUIT SUGAR GENE(S) s₁s₂s₃s₄
<p>GROWTH CONDITIONS INFORMATION SET 1 <u>240X</u></p> <hr/> <ul style="list-style-type: none"> • DAY TEMPERATURE 5-20°C • SOIL FERTILITY 6000 (kg NITROGEN/HA) • SOIL MOISTURE 20% 	<p>GROWTH CONDITIONS INFORMATION SET 2 <u>241X</u></p> <hr/> <ul style="list-style-type: none"> • DAY TEMPERATURE 23-25°C • SOIL FERTILITY 4000 (kg NITROGEN/HA) • SOIL MOISTURE 30%
<p>PRODUCT FEATURE RANGE SET 1 <u>256X</u></p> <hr/> <ul style="list-style-type: none"> • FRUIT SIZE 50-60mm • β-CAROTENE 6-8ppm • LYCOPENE 75-85ppm • TOTAL FRUIT SUGARS 50-55% 	<p>PRODUCT FEATURE RANGE SET 2 <u>257X</u></p> <hr/> <ul style="list-style-type: none"> • FRUIT SIZE 70-80mm • β-CAROTENE 1-2ppm • LYCOPENE 55-65ppm • TOTAL FRUIT SUGARS 55-65%

FROM FIG. 3C

TO FIG. 3E

FIG. 3D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DEF. ETSMAN		

Serial No. 09/021,107
 Inventor: Johnson
 Title: Method and Information System For Non-Random Selection of Uniform
 Strains And Functional Features For Tissue And Plant Product Processing

252X →

	<p>GENETIC INFORMATION CULTIVAR X <u>255X</u></p> <hr/> <ul style="list-style-type: none"> • FRUIT SIZE GENE(S) f₁ • β-CAROTENE GENE(S) B₁B₂B₃B₄ • LYCOPENE CONTENT GENE(S) hp₁hp₂hp₃hp₄ • FRUIT SUGAR GENE(S) s₁s₂s₃s₄
	<p>GROWTH CONDITIONS INFORMATION SET 3 <u>242X</u></p> <hr/> <ul style="list-style-type: none"> • DAY TEMPERATURE 27-30°C • SOIL FERTILITY 2000 (kg NITROGEN/HA) • SOIL MOISTURE 50%
	<p>PRODUCT FEATURE RANGE SET 3 <u>258X</u></p> <hr/> <ul style="list-style-type: none"> • FRUIT SIZE 90-100mm • β-CAROTENE 1-2ppm • LYCOPENE 55-65ppm • TOTAL FRUIT SUGARS 65-70%

FROM FIG. 3D

FIG. 3E

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DP/ FISMAR		

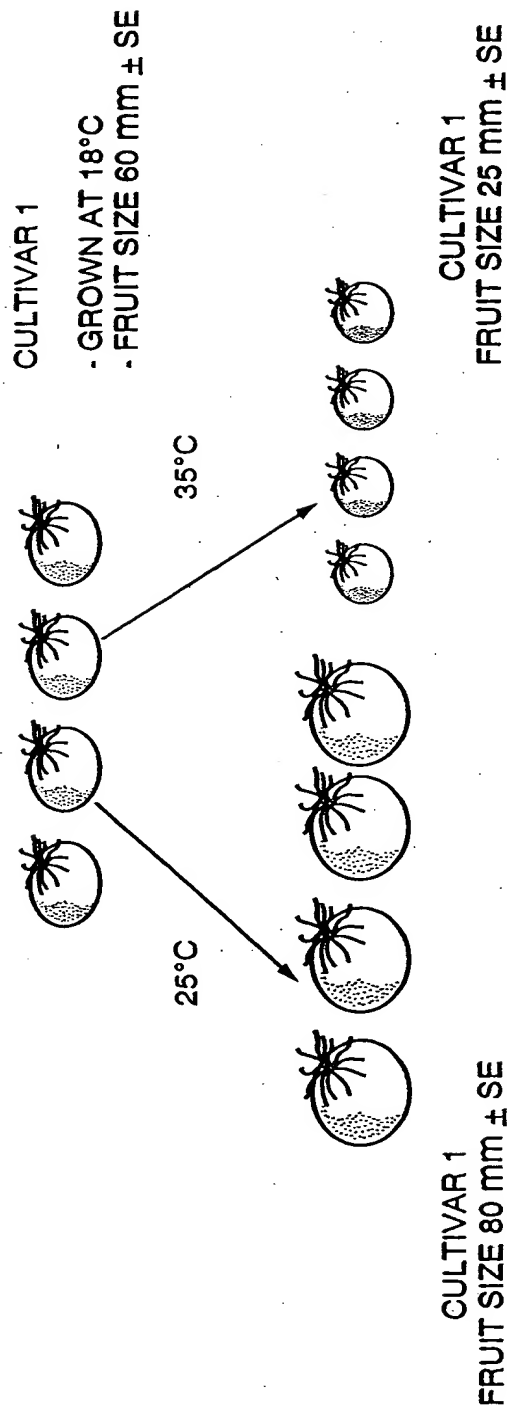


FIG. 4A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DR. FTSMAN		

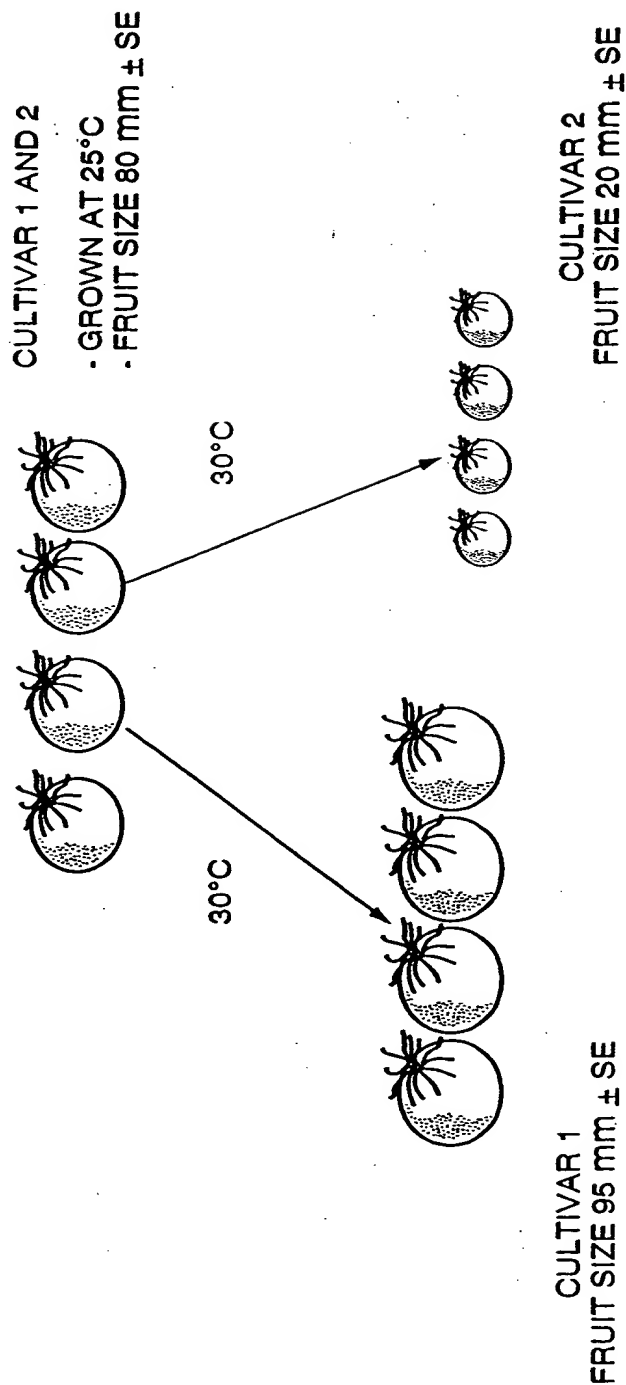


FIG. 4B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DP&FTSMAN		

Inventor: Johnson
Title: Method and Information System For Non-Random Selection of Cells
Structure And Functional Features For Tissue And Plant Production

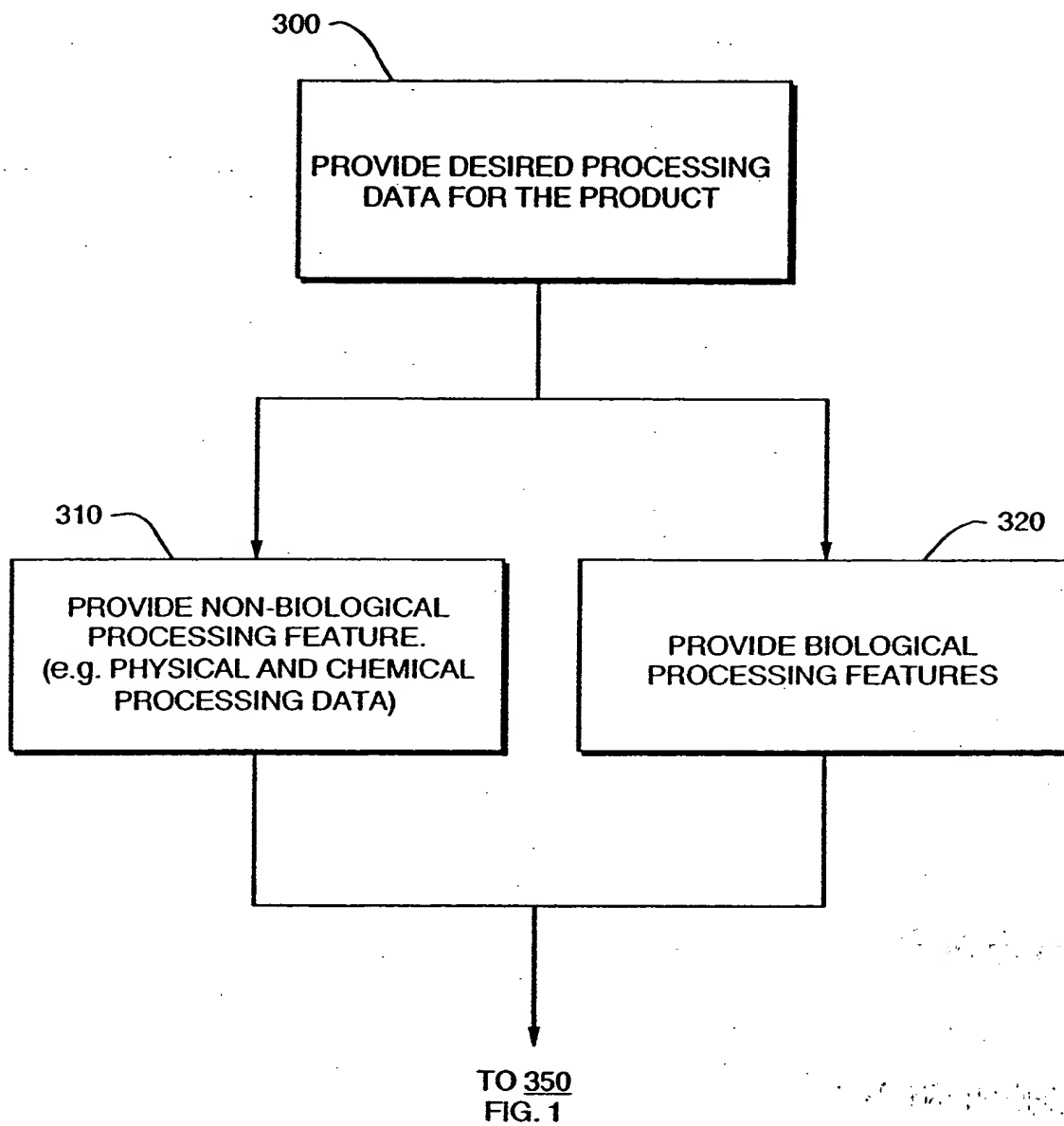


FIG. 5

Serial No.: 091241, 107

Inventor: Johnson

Title: Method and Information System For Non-Random Selection Of Uniform
Structural And Functional Features For Tissue And Plant Product Processing

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

350a 350b 350X

<div>PRODUCT PROCESSING DATA SET 1 <u>352a</u></div> <div><ul style="list-style-type: none">MILLING TIME 15 MIN.HEATING TEMP 90°C</div> <div>PRODUCT PROCESSING FEATURE RANGE SET 1 <u>354a</u></div> <div><ul style="list-style-type: none">LYCOPENE 55-65 ppmSIZE 90-100 mmTOTAL FRUIT SUGARS 65-70%β-CAROTENE CONTENT 1-2 ppm</div>	<div>PRODUCT PROCESSING DATA SET 2 <u>352b</u></div> <div><ul style="list-style-type: none">MILLING TIME 10 MIN.HEATING TEMP 80°C</div> <div>PRODUCT PROCESSING FEATURE RANGE SET 2 <u>354b</u></div> <div><ul style="list-style-type: none">LYCOPENE 70-80 ppmSIZE 70-80 mmTOTAL FRUIT SUGARS 65-70%β-CAROTENE CONTENT 4-6 ppm</div>	<div>PRODUCT PROCESSING DATA SET n <u>352X</u></div> <div><ul style="list-style-type: none">MILLING TIME 5 MIN.HEATING TEMP 70°C</div> <div>PRODUCT PROCESSING FEATURE RANGE SET n <u>354X</u></div> <div><ul style="list-style-type: none">LYCOPENE 90-100 ppmSIZE 50-60 mmTOTAL FRUIT SUGARS 65-70%β-CAROTENE CONTENT 8-10 ppm</div>
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FIG. 6

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

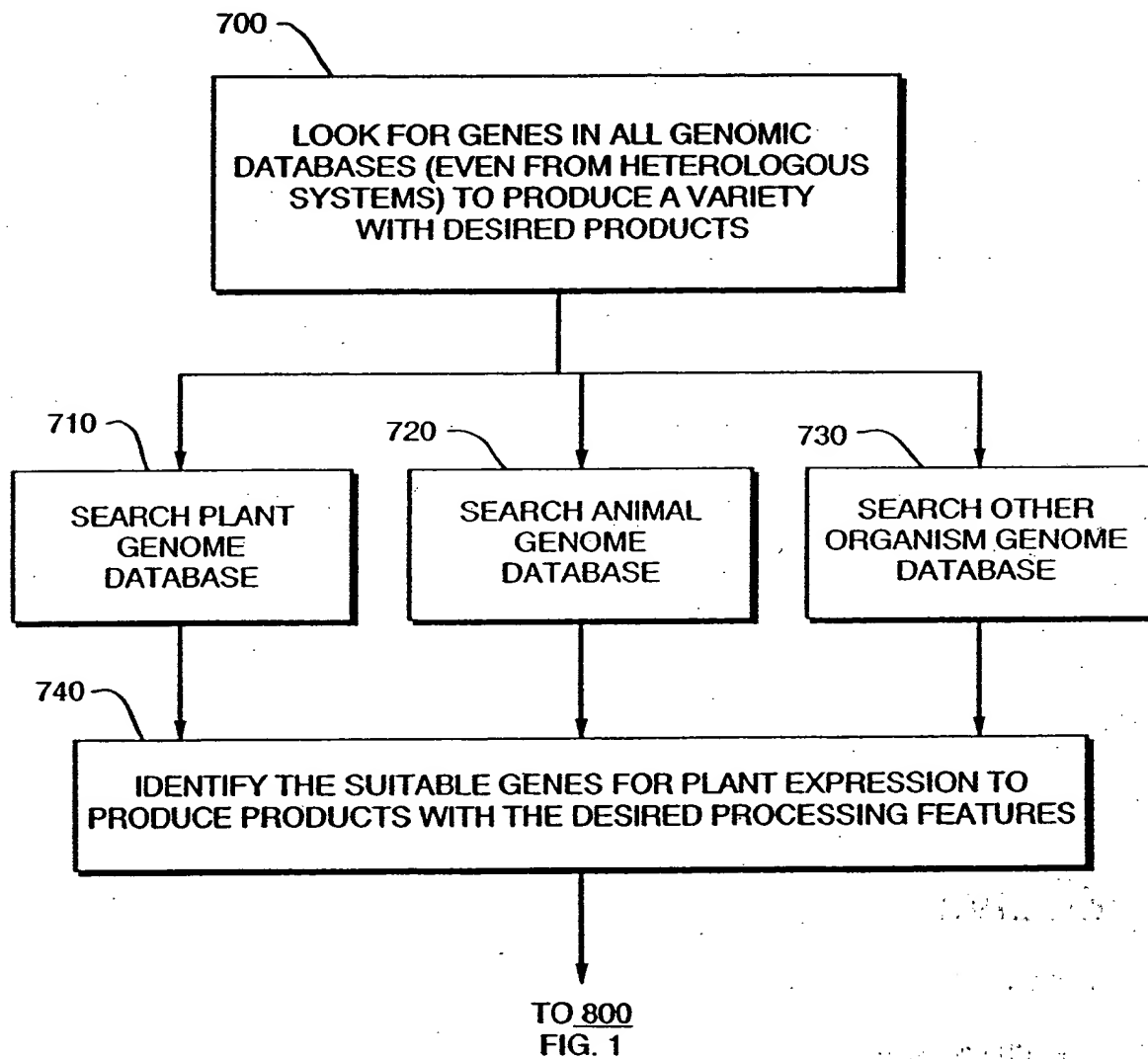


FIG. 7

Inventor: Johnson

Title: Method and Information System For Non-Random Selection Of Uniform
Structural And Functional Features For Tissue And Plant Product Processing

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

40

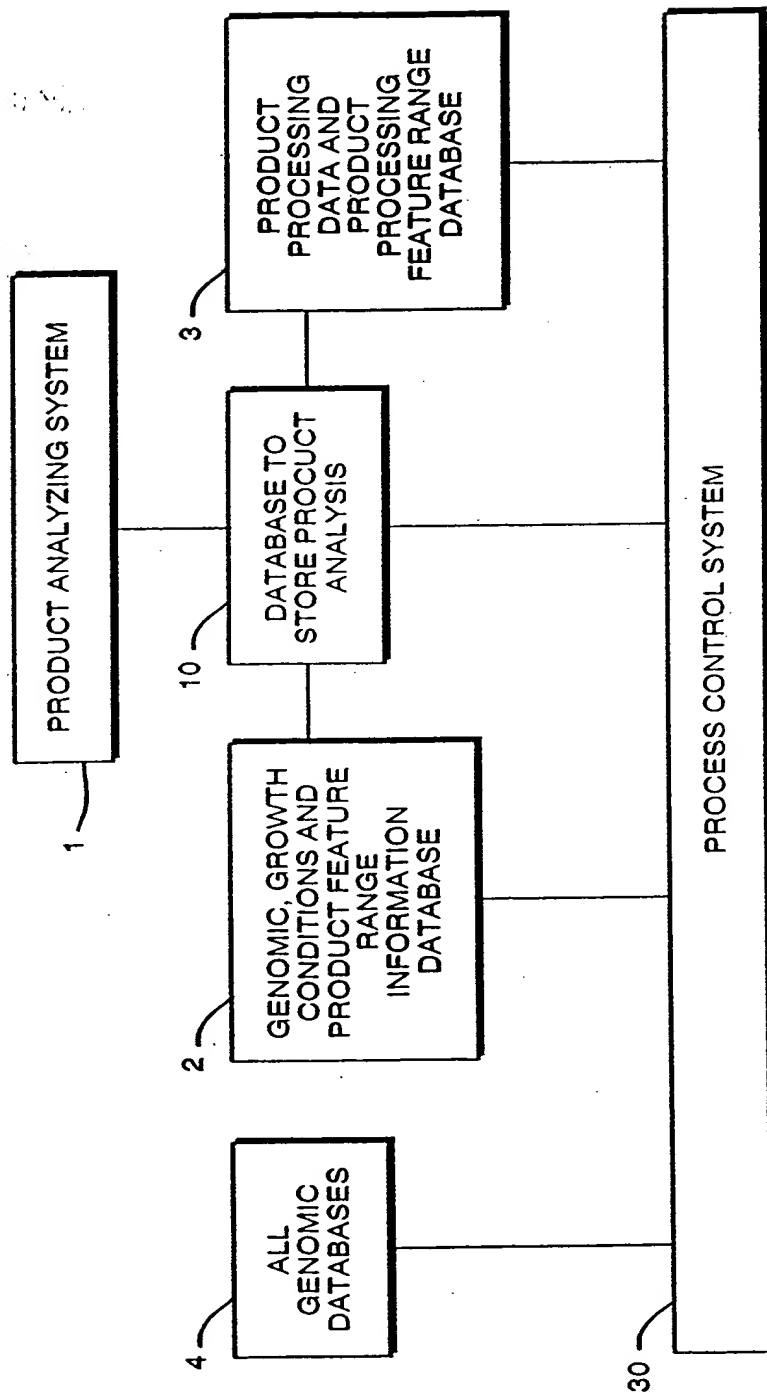


FIG. 8